

Remarks

Applicant earnestly requests examiner to consider the following remarks.

The Examiner has rejected all the claims under 35 U.S.C. §103 as unpatentable over either Japanese Patent Document No. JP 55-81317 to Shimonaka ("the '81317 reference") or U.S. Patent No. 5,329,940 to Adair ("the '940 patent") in view of U.S. Patent No. 5,921,917 to Barthel et al. ("the '917 patent").

All the claims of the present invention require, among other elements, a substantially rigid shaft, the substantially rigid shaft having an outer diameter that lies in a range of about 1.5 mm to about 2.5 mm.

Applicant submits that the '917 patent is directed towards a versatile system having a "malleable sheath" such that "the practitioner can bend the sheath 40 into a desired shape for a particular patient" and that this "feature allows the viewing system 20 to be used with endotracheal tubes 80 of any length for different size patients." (Col. 7, lines 44-52.) Further commenting on the versatility of the system taught in the '917 patent, it states that "[s]ince the sheath 40 may be shaped as desired, a single standard length sheath 40 may be used for any patient." (Col. 7, lines 53-55.) The '917 patent further states that "the sheath is malleable and is made of aluminum or preferable stainless steel tubing so that it can be bent or shaped to accommodate a particular patient's anatomy." (Col. 8, lines 3-6.) This is also stated as one of the primary objects of the invention, namely "to be able to use one size of endoscopic viewing system with several sizes of endotracheal tubes such as from pediatric to adult sizes." (Col. 2, lines 43-45.) To achieve this object, namely having a single scope that may be used with many varying individuals of different sizes and anatomies, the '917 patent teaches that a "malleable sheath" must be used and is taught for every embodiment (Col. 2, line 65; Col. 3, lines 40-41 and 61-64; Col. 4, line 1; Col. 5, line 7; Col. 7, lines 3855 and 66;

Col. 8, lines 3-7; Col. 11, line 14; Col. 12, line 33; Col. 13, line 41; Col. 14, lines 26 and 50; Col. 15, line 53; Col. 16, line 37; Col. 17, line 10; and Col. 18, line 12).

Unlike the '917 patent, all the claims of the present invention require a substantially rigid shaft that is resistant to bending which is undesirable. The '917 patent teaches that a single scope should be used from pediatric to adult sizes, and as the examiner has noted, the '917 patent discloses a shaft member with a diameter of about 2.5 mm to about 3.5 mm in diameter (Col. 2, lines 43-45; Col. 8, lines 32-34). In contrast, the specification of the present application teaches that the shaft member must be in range from about 1.5 mm to about 2.5 mm. However, providing a shaft with this small of a diameter necessitates having a substantially rigid shaft to avoid damaging the optical fiber bundle located in the shaft due to bending and/or kinking. The malleable shaft member taught in the '917 patent would not protect the fiber optical bundle from damage or degradation where the diameter of the shaft lies in a range from about 1.5 mm to about 2.5 mm (Page 5, lines 22-28; and page 10, lines 17-26).

Applicant further respectfully submits that it is undesirable to change the preformed shape of the shaft member of the present invention where the specification states that the shaft "is optimally adapted to the employed tube and gives the tube its form stability in the optimal curved shape." (Page 5, lines 3-4; page 7, lines 24-26.) This is again contrary to one the primary stated objects of the '917 patent that "the sheath 40 may be shaped as desired, a single standard length sheath 40 may be used for any patient." (Col. 7, lines 53-55.) As described in the specification, intubating premature infants and babies presents different problems from intubating adults or even children and the preformed substantially rigid shaft is the desired shape to accomplish the procedure and should not be changed.

Therefore, Applicant respectfully submits that because the '917 patent fails to teach, disclose or suggest a substantially rigid shaft having a diameter from about 1.5 to about 2.5 mm as required by all the claims of the present invention, it cannot render the present claims obvious. Applicant further submits that the '917 patent teaches away from a substantially rigid shaft because one of the primary objects of the invention is to provide a malleable sheath.

Applicant respectfully submits that neither the '81317 reference nor the '940 patent teach an intubation device that may be utilized for intubation of premature babies or infants because neither reference teaches, discloses or suggests an outer diameter of a shaft having a range from about 1.5 mm to about 2.5 mm as required by all the claims of the present invention. Applicant further respectfully submits that the suggested combination of the '917 patent with either the '81317 reference or the '940 patent to arrive at the claimed invention is inappropriate because it would work against the stated object of the invention of the '917 patent. Even though the '81317 reference teaches that the shaft may be rigid, it is inappropriate to combine it with the '917 patent that teaches that the shaft must be malleable to obtain the stated objects of the '917 patent. The Examiner has noted that neither the '81317 reference nor the '940 patent teach the range of from about 1.5 mm to about 2.5 mm, which is the range required for intubation of premature infants and babies.

Applicant further submits that one could arrive at many differing inventions based upon the Examiner's suggested combination. For instance, one could arrive at an endoscope having a malleable sheath and having a range from about 2.5 mm to about 3.5 mm having a shape that may be changed and formed by the physician for use with many differing patients. This resulting device would be undesirable for intubation of premature infants and babies because of the large diameter of the shaft, and also by the fact that the shaft may be bent by the physician away from the optimal preformed shape. Applicant therefore respectfully submits that, because one could arrive at various inventions based upon the suggested combination of prior art, one would need

the benefit of the present application to arrive at claim 1. Applicant further submits that, even in light of the suggested combination, one still needs to further modify that combination to obtain claim 1.

Applicant further respectfully submits that there is no suggestion in the references themselves to combine them, nor is there any motivation to replace the malleable sheath taught in the '917 patent and the '940 patent with the rigid sheath taught in the '81317 reference. In fact, both the '917 patent and the '940 patent teach away from such a modification.

It is respectfully submitted that claims 1-9 and 11, all of the claims remaining in the application, are in order for allowance, and early notice to that effect is respectfully requested.

Respectfully submitted,



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